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Local Counsel for Plaintiff  
*Denso Corporation*

**IN THE UNITED STATES DISTRICT COURT  
FOR THE CENTRAL DISTRICT OF CALIFORNIA**

DENSO CORPORATION, )  
)  
*Plaintiff,* )  
)  
v. ) **JURY TRIAL DEMANDED**  
)  
SKYWORKS SOLUTIONS, INC. and )  
SKYWORKS FILTER SOLUTIONS )  
JAPAN CO., LTD., )  
)  
*Defendants.* )

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff DENSO Corporation (“DENSO” or “Plaintiff”), in its Complaint for patent infringement against Defendants Skyworks Solutions, Inc. and Skyworks Filter Solutions Japan Co., Ltd. (collectively, “Skyworks” or “Defendants”), hereby alleges as follows:

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**NATURE OF THE ACTION**

1. This is a civil action for the infringement of United States Patent No. 7,758,979 B2 (“the ‘979 Patent” or the “Patent-in-Suit”) under the Patent Laws of the United States, 35 U.S.C. § 1 et seq.

**THE PARTIES**

**DENSO Corporation**

2. Plaintiff DENSO Corporation is a Japanese corporation having its primary place of business at 1-1, Showa-cho, Kariya, Aichi, 448-8661, Japan.

3. DENSO is an innovative, global manufacturing company. The company was founded in 1949 and is headquartered in the city of Kariya, Aichi Prefecture, Japan. The name DENSO is formed from the Japanese words for “electricity” (*denki*) and “device” (*sochi*).

4. Now listed on the Global Fortune 500, DENSO manufactures and sells an array of automotive components, as well as industrial systems, consumer products, and other electronics. In recent years, DENSO has also focused on the semiconductor sector.

5. DENSO is the owner of all rights, title, and interest in the Patent-in-Suit.

**The Skyworks Defendants**

6. Defendant Skyworks Solutions, Inc. is a corporation having its primary place of business and headquarters at 5260 California Avenue, Irvine, California, USA.

7. Skyworks Solutions, Inc. is a global semiconductor company that specializes in analog solutions, including radio-frequency front-end solutions for mobile devices.

1 8. Defendant Skyworks Filter Solutions Japan Co., Ltd. is a Japanese limited liability  
2 company having its primary place of business at 2-150 1-Chome, Hirabayashikita, Suminoe-ku,  
3 Osaka, 559-0026, Japan.

4  
5 9. Skyworks Filter Solutions Japan Co., Ltd. is a subsidiary of Skyworks Solutions, Inc. It  
6 focuses on the development and manufacturing of filter devices used in the front-end of mobile  
7 devices.

8 10. Skyworks supply electronic components – such as amplifiers, filters, switches, and  
9 integrated front-end modules – for mobile devices, wireless routers, medical devices and  
10 automobiles.

11 11. Skyworks manufacture, import, offer to sell and sell analog and mixed-signal  
12 semiconductor products in the United States and worldwide and describe themselves as “helping  
13 to lead the global shift to 5G.”

14  
15 12. Skyworks’ product portfolio includes filters, devices for recovering and separating mixed  
16 and modulated data in the RF stages of mobile devices. Skyworks’ filters are also included in  
17 integrated front-end modules sold by Skyworks.

18 13. Skyworks touts its filter products, including its advanced bulk acoustic wave (“BAW”)  
19 filters, as among its key products that “help enable the true potential of 5G.”

20  
21 14. Skyworks is a supplier to major smartphone manufacturers, including Apple Corporation  
22 and Samsung Electronics Co., Ltd., both of which are major sellers in the United States market.

23 15. Other key customers of Skyworks in the wireless connectivity industry include Amazon,  
24 Cisco, Ericsson, Google, Lenovo, LG Electronics, Motorola, NETGEAR, Nokia, and Sony.

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26 **JURISDICTION AND VENUE**

27 16. This is an action for patent infringement arising under the patent laws of the United  
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1 States. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

2 17. This Court has personal jurisdiction over Skyworks because Skyworks conducts business  
3 in and has committed acts of patent infringement and/or induced others to commit acts of patent  
4 infringement in this District, the State of California, and elsewhere in the United States, and has  
5 established minimum contacts with this forum state such that the exercise of jurisdiction would  
6 not offend the traditional notions of fair play and substantial justice. On information and belief,  
7 the Skyworks Filter Solutions Japan, Co. Ltd. sells goods with knowledge they will enter the  
8 United States and directs their activities to the United States, including California through their  
9 own action and that of Skyworks Solutions, Inc.  
10

11 18. Upon information and belief, Skyworks transacts substantial business with entities and  
12 individuals in the State of California and the Central District of California, by, among other  
13 things, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the  
14 Accused Products that infringe the Patent-in-Suit to its distributors and customers in this District.  
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16 19. Skyworks also places the Accused Products into the stream of commerce with the  
17 knowledge and expectation that they will be sold in the State of California, including this District.  
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19 20. Skyworks Solutions, Inc. is subject to this Court's general and specific jurisdiction  
20 pursuant to due process and/or the California Long Arm Statute due at least to its substantial  
21 business in the State of California and this District, including maintaining a principal place of  
22 business at 5260 California Avenue, Irvine, California, through its infringing activities, because it  
23 regularly does and solicits business herein, and/or because it has engaged in persistent conduct  
24 and/or has derived substantial revenues from goods and services provided to customers in the  
25 State of California and this District.

26 21. On information and belief, Skyworks Filter Solutions Japan Co., Ltd. is subject to this  
27 Court's general and specific jurisdiction pursuant to due process and/or the California Long Arm  
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1 Statute due at least to its substantial business in the State of California and this District, through  
2 its infringing activities, because it regularly does and solicits business herein, and/or because it  
3 has engaged in persistent conduct and/or has derived substantial revenues from goods and  
4 services provided to customers in the State of California and this District.  
5

6 22. Upon information and belief, Defendants do business themselves, or through their  
7 subsidiaries, affiliates, and agents, in the State of California and the Central District of California.

8 23. Skyworks lists products, including its front-end modules for 4G and 5G, and offers them  
9 for sale to U.S. customers through its U.S. website. *See, e.g.,*  
10 <https://www.skyworksinc.com/Products/Front-end-Modules>. Each product listing features a “Talk  
11 to Sales” button, which allows customers to request product information, schedule a sales  
12 engineer call, request product samples, or arrange a sales visit. *See, e.g.,*  
13 <https://www.skyworksinc.com/Talk-To-Sales>.  
14

15 24. Skyworks also sells, offers to sell, and demonstrates its products through its U.S.-based  
16 sales office, including its California office, as well as through its network of representative and  
17 distributors, which sell to customers in California. In addition, according to its business card,  
18 Skyworks’ U.S. Sales department may be reached at by email at [sales@skyworksinc.com](mailto:sales@skyworksinc.com) and by  
19 phone in California at (949) 231-3000.  
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21 25. Skyworks’ U.S. website’s “Sales and Channel Partners Search” allows customers to  
22 search for the sales offices, sales representatives, and distributors who sell to customers in  
23 California. *See, e.g.,* <https://www.skyworksinc.com/How-to-Buy>.

24 26. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b)  
25 because Skyworks have both established places of business in this judicial district and has  
26 committed acts of infringement in this judicial district.  
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**FACTUAL BACKGROUND**

27. DENSO has a history of involvement in research and development in national projects funded by the Japanese government, including collaborations and initiatives to support technological advancements and innovation.

28. One such innovation was in the area of materials used to fabricate advanced radio-frequency (RF) filters.

29. During the first decade of the 2000s, teams from DENSO and The National Institute of Advanced Industrial Science and Technology (Tokyo, Japan) (“AIST”) collaborated on a research product to develop new piezoelectric materials for use in BAW filters.

30. BAW filters are compact, relatively low-cost RF filters that can be used in a wide range of applications. BAW filters are widely used in consumer products for mobile communication systems.

31. Piezoelectric materials are materials that convert mechanical pressure to electrical energy and vice versa.

32. BAW filters operate by converting electrical energy into acoustic or mechanical energy on a piezoelectric material. Since they can operate at higher frequencies than other types of filters, BAW filters are widely used for many of the bands associated with 4G and 5G mobile technology.

33. The piezoelectric material that was traditionally used in BAW filters is aluminum nitride (AlN).

34. However, it is difficult for traditional AlN BAW filters to meet the performance requirements of some 5G bands. This renders AlN BAW filters sub-optimal for use in 5G mobile devices.

1 35. Today, most of the world's largest economies have implemented commercial 5G  
2 networks, and the world's leading smartphone manufacturers have launched multiple generations  
3 of 5G-enabled devices.

4 36. 5G is delivering faster speeds, increased bandwidth and capacity, significantly lower  
5 latency, and more reliable and secure wireless connectivity.

6 37. It is of critical importance for BAW filter devices to meet the performance requirements  
7 demanded by 5G. This problem was solved by using a piezoelectric material made up of  
8 scandium, aluminum nitride (ScAlN) thin films. This ScAlN thin film allows for lower-power  
9 consumption BAW filter components that can be miniaturized, allowing for multiple filters to  
10 cover high frequency and wide bands such as 5G. As such, the use of ScAlN thin films enables  
11 modules necessary for 5G mobile devices. The importance of the ScAlN has grown as 5G has  
12 proliferated.

13 38. DENSO pioneered the technology for ScAlN thin films for BAW filters.

14 39. The invention of ScAlN thin film technology has been recognized by the industry as a  
15 revolutionary technology of critical importance for 5G application.

16 40. For example, the paper, "*Aluminum scandium nitride thin-film bulk acoustic resonators*  
17 *for 5G wideband applications*," by Zou et al. in *Microsystems & Nanoengineering- Nature* (2022)  
18 recognized that it is challenging for traditional AlN-based BAW filters to meet several of the  
19 allocated 5G bands and that this problem can be solved by using ScAlN thin films that exhibit a  
20 large mechanical-electrical coupling coefficient and excellent figure of merit (FOM).

21 41. A white paper entitled "*Advanced BAW Filter Technology and Its Impact on 5G*," notes  
22 that a key advantage of the new higher-frequency bands allocated for 5G is increased bandwidth,  
23 which delivers higher data rates and increases network capacity: "As a result, 5G BAW filters  
24 must be able to operate at higher frequencies than previous filter generations, they must also be  
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1 able to support those frequencies with much greater bandwidth. Increasing filter bandwidth  
2 requires enhanced piezo-electric coupling. The use of Scandium-doped AlN piezo layers has been  
3 key to overcoming this problem.”

4  
5 42. The importance of ScAlN piezoelectric layers in increasing electromechanical coupling  
6 and in the design of BAW filters that can be used for 5G applications has been repeatedly  
7 recognized by the industry. See, e.g., *Super-High-Frequency Bulk Acoustic Resonators Based on*  
8 *Aluminum Scandium Nitride for Wideband Applications*, Dou et al., *Nanomaterials*; “*A Film Bulk*  
9 *Acoustic Resonator Based on Ferroelectric Aluminum Scandium Nitride Films*,” Wang et al., *J.*  
10 *Microelectromechanical Syst.*; *Scandium Aluminium Nitride-Based Film Bulk Acoustic*  
11 *Resonators*, Schneider et al., *Proceedings 2017*.

12  
13 43. Indeed, Skyworks itself has recognized the importance of ScAlN piezoelectric layers in  
14 increasing electromechanical coupling. See, e.g., “*A Review of Lamé and Lamb Mode Crystal*  
15 *Resonators for Timing Applications and Prospects of Lamé and Lamb Mode PiezoMEMS*  
16 *Resonators for Filtering Applications*,” C.S. Lam, Anming Gao, Chih-Ming Lin, Jie Zou,  
17 Skyworks Solutions, Inc., Irvine, California, USA.

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20 **The Skyworks Accused Products**

21 44. In 2019, Skyworks launched a new BAW filter product, Film Bulk Acoustic Resonator  
22 (FBAR).

23 45. Skyworks notes on its website that its BAW filters are “particularly beneficial for next-  
24 generation wireless standards, including Wi-Fi and 5G.”

25 (<https://www.skyworksinc.com/en/Thought-Leadership/Filters>)

26 46. The Skyworks FBAR uses ScAlN as a piezoelectric material.  
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1 47. In a July 21, 2020 press release, Skyworks announced that it had, by that time, “shipped  
2 more than 150 million modules incorporating BAW filters for 5G mobile devices,” and had  
3 secured multiple design wins with “market leading customers.”

4 48. Skyworks notes on its website that by adding “BAW filters, our total addressable market  
5 in mobile significantly expands and positions us to support a wider array of customers, markets,  
6 and applications. Since 2015, Skyworks has produced more than 11 billion filters.”

7 (<https://www.skyworksinc.com/en/Thought-Leadership/Filters>)

8 49. Skyworks sells BAW filters that use ScAlN as a piezoelectric material and also  
9 incorporates these BAW filters in the integrated front-end modules that it sells, including, by way  
10 of example its Sky5 modules that support 5G such as the Sky5 04122, the Sky5 0313 6943 2326,  
11 Sky5 144102, Sky5 04418, Sky5 0313 4688 2326, and Sky5 53921-16 0443 2504. The modules  
12 are the accused products in this case because that is the unit that is sold by Skyworks and the  
13 ScAlN technology is critical to driving the sales of these products. In fact, many of the technical  
14 papers say that ScAlN technology is the lynchpin factor that enables 5G—Skyworks could not be  
15 competitive in the market for 5G modules without this technology developed by DENSO and  
16 AIST.

17 50. Skyworks’ mobile device customers, including Apple, use Sky5 modules in 5G-compliant  
18 devices, including by way of example, the Apple iPhone 13 Pro Max, the Apple iPhone 15 Pro  
19 Max, and the Apple iPhone 16e.

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24 **Skyworks Approached DENSO to Try To License the ScAlN Technology**

25 51. On November 8, 2019, Skyworks contacted DENSO to inquire about securing a license to  
26 DENSO’s ScAlN patent portfolio. Despite this early interest, Skyworks has yet to take a license  
27 or make anything but a *de minimis* offer.

1 52. On November 11, 2019, DENSO responded, communicating its licensing policy and  
2 inquiring about Skyworks business.

3 53. Skyworks, however, continually delayed any substantive negotiations. For example, the  
4 simple process of agreeing on an NDA took two years. As a result the parties did not enter into  
5 substantive license discussions.  
6

7 54. By May of 2022, however, negotiations had stalled. DENSO sent a number of  
8 communications requesting Skyworks' response, but Skyworks went silent.

9 55. On January 26, 2023, Skyworks informed DENSO that it was reconsidering the need for a  
10 license from DENSO to its ScAlN patent portfolio.

11 56. Follow-up communications from DENSO in February and April of 2023 were left un-  
12 responded to.  
13

14 57. On April 10, 2024, DENSO sent Skyworks a chart demonstrating that Skyworks' BAW  
15 filter products and front-end modules that include them were infringing the Patent-in-Suit.

16 58. Thereafter, during the remainder of calendar year 2024, the parties sought to negotiate the  
17 terms of a license, but they did not come to an agreement on terms for a license.

18 59. During the discussions, Skyworks has stalled and refused to meet in person. In fact, the  
19 counsel who was their lead negotiator until recently would not even activate his camera during  
20 video meetings. Such resistance was continuous, and Skyworks has not shown good faith toward  
21 making progress towards a license.  
22

23 60. For example, recently Skyworks hired a new in-house counsel who insisted on over three  
24 months to get up to speed even though Skyworks has notice of and has known of the patents since  
25 at least 2019.

26 61. During the over five year period in which Skyworks has known of the Patent-in-Suit,  
27 Skyworks has expanded its use of the patented technology, despite not having a license.  
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**THE PATENT-IN-SUIT**

62. On July 20, 2010, the US Patent Office issued U.S. Patent No. 7,758,979 (“the ‘979 Patent” or “the Patent-in-Suit”), entitled “Piezoelectric Thin Film, Piezoelectric Material, and Fabrication Method of Piezoelectric Thin Film and Piezoelectric Material, and Piezoelectric Resonator, Actuator Element, and Physical Sensor Using Piezoelectric Film.” The ‘979 Patent is valid and enforceable. A copy of the ‘979 Patent is attached as Exhibit 1.

63. The original assignees of the ‘979 Patent were The National Institute of Advanced Industrial Science and Technology (Tokyo, Japan) (“AIST”) and DENSO.

64. Presently, DENSO is the owner of all rights, title, and interest in and to the ‘979 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ‘979 Patent.

65. The invention disclosed and claimed in the ‘979 Patent relates to a piezoelectric material and a piezoelectric thin film, in which scandium is added to aluminum nitride. When used as the piezoelectric material in BAW filters, this provides for higher performance BAW filter devices that are more compact and which consume less power. These devices have improved piezoelectric response, while maintaining AlN’s favorable thin-film characteristics of elastic wave propagation speed, Q value, and frequency-temperature coefficient.

66. Exemplary Claim 6 of the ‘979 Patent covers:

A piezoelectric thin film comprising an aluminum nitride thin [film] containing scandium,

a content ratio of the scandium being in a range of 10 atom % to 35 atom % or 40 atom % to 50 atom % on an assumption that a total amount of a number of atoms of the scandium and a number of atoms of aluminum in the aluminum nitride thin film is 100 atom %.

67. The invention of the ‘979 Patent is widely recognized as a pioneering patent in the field.

1 68. The first named inventor on the '979 Patent is Mr. Morito Akiyama, who led a joint team  
2 from AIST and DENSO in developing the technology disclosed and claimed in the '979 Patent.

3 69. As noted in "*Piezoelectric Aluminium Scandium Nitride (AlScN) Thin Films Material*  
4 *Development and Applications in Microdevices*," Micromachines (Ed. Agnė Žukauskaitė): "The  
5 enhanced piezoelectric properties of aluminum scandium nitride ( $\text{Al}_{1-x}\text{Sc}_x\text{N}$  or AlScN) were  
6 discovered in 2009 by Morito Akiyama's team." This article also notes that "After Akiyama  
7 demonstrated the large enhancement of the piezoelectric coefficient by doping AlN with  
8 scandium, a growing number of studies have been conducted to exploit AlScN in MEMS, with  
9 particular interest in RF applications."  
10

11 70. As noted in "*In Situ Synchrotron XRD Characterization of Al-ScN Thin Films for MEMS*  
12 *Applications*," Jiang et al., Materials, "Rare earth element doping...has been proven to be an  
13 effective method to improve the piezoelectric properties of AlN materials. Among them,  
14 scandium doping is regarded as the most efficient method since Akiyama, M. demonstrated a  
15 ~400% piezoelectric response increase in 2009."  
16

17 71. On June 12, 2018, on behalf of DENSO and AIST, Mr. Akiyama and the co-inventors of  
18 the '979 Patent won the the Japan Institute of Invention and Innovation's 21st Century Invention  
19 Encouragement Award and 21st Century Invention Contribution Award for their invention of  
20 High-Pressure Electric Nitride Scandium Aluminum Thin Film, as described in the Japanese  
21 counterpart to the '979 Patent.  
22

23 72. The 21st Century Invention Encouragement Award and the 21st Century Invention  
24 Contribution Award are presented to individuals who have made outstanding contributions to the  
25 creation and implementation of inventions that have demonstrated significant practical effects or  
26 are expected to have a substantial impact in shaping society in the 21st century.  
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1 73. In connection with these awards, the invention and its impact was described as follows:  
2 “Conventionally, high-frequency filters for smartphones are approaching the performance limit  
3 due to the high frequencies associated with high-speed communication. Therefore, FBAR filters  
4 using thin film bulk acoustic wave resonators (FBAR) are being developed. Aluminum nitride  
5 (AlN) piezoelectric thin films are used in FBAR filters. AlN thin films are excellent in elastic  
6 wave propagation speed and temperature coefficient performance, making them ideal as a  
7 piezoelectric material for filters. However, compared to other piezoelectric materials, AlN thin  
8 films have low piezoelectricity and require high operating voltages, making it difficult to reduce  
9 power consumption and increasing the insertion loss of the filter. In this invention, we  
10 investigated ScAlN thin films, which are AlN thin films with scandium (Sc) added, and  
11 succeeded in improving the piezoelectricity of AlN thin films by more than four times. There has  
12 been little research on improving the piezoelectricity of nitride thin films. ScAlN thin films can  
13 improve piezoelectricity without losing the characteristics of AlN thin films' elastic wave  
14 propagation speed and temperature coefficient performance. As a result, it is highly expected that  
15 FBAR filters using ScAlN thin films can reduce power consumption and reduce insertion loss.”

16 74. In connection with this award, it was further stated: “The recipient of this award is the  
17 nitride scandium aluminum (ScAlN) thin film piezoelectric material. Conventionally, by adding  
18 scandium (Sc) to the aluminum nitride (AlN) film, which is used as a high-frequency filter  
19 material in smartphones, the piezoelectric properties have been improved by five times. The filter  
20 device composed of this material enables both compatibility with the next-generation standard 5G  
21 and low power consumption, and it is already installed in Apple's iPhone X. The award  
22 recognizes the material's versatility, namely its simplicity as a ternary system material, and the  
23 wide range of potential applications and markets. In fact, there are ongoing licensing agreements  
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1 or negotiations with multiple domestic and international companies, including applications  
2 beyond the mentioned filter.”

3  
4 **COUNT I**

5 *(Skyworks’ Infringement of the Patent-in-Suit)*

6 75. Paragraphs 1 to 74 are hereby incorporated by reference.

7 76. **Direct Infringement:** Skyworks, without authorization or license from DENSO, has  
8 directly infringed, and continues to directly infringe, literally and/or by the doctrine of  
9 equivalents, individually and/or jointly, the Patent-in-Suit, by making, utilizing, importing,  
10 testing, distributing, selling, and/or offering for sale (from and in the United States) the Accused  
11 Products that infringe the Patent-in-Suit, including but not limited to at least the Accused Products  
12 identified in the example chart incorporated, per paragraph 77 below, into this Count  
13 (collectively, “Example Skyworks Count I Products”) that infringe at least the example claims of  
14 the Patent-in-Suit identified in the chart incorporated into this Count literally or by the doctrine of  
15 equivalents.  
16

17 77. Exhibit 2 (claim chart) includes the Example Skyworks Count I Products and Example  
18 Patent Claims. As set forth in the chart, these products practice the technology claimed by the  
19 Patent-in-Suit. Accordingly, the Example Skyworks Count I Products incorporated in the chart  
20 satisfy all elements of the Example Patent Claims.  
21

22 78. **Induced Infringement:** Skyworks has also induced and continues to induce the  
23 infringement of the Patent-in-Suit by inducing its partners, vendors, customers, and/or third  
24 parties to use or cause to use or import its products, such as Example Count I Products, in an  
25 infringing manner as described above, including encouraging and instructing its partners, vendors,  
26 customers, and/or third parties to infringe the Patent-in-Suit. Skyworks makes sales abroad with  
27 knowledge that its customers would incorporate the infringing products into products to be sold in  
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1 the United States and import the infringing products into the United States. On information and  
2 belief, some of the substantial activities for foreign sales have been controlled, directed and/or  
3 assisted by actions in the United States.

4  
5 79. Skyworks knew of the Patent-in-Suit and knew that the actions it encouraged others to  
6 take would be an infringement.

7 80. For example, on information and belief, Skyworks offers and sells products to its  
8 customers and third parties abroad including the front-end modules provided by the Example  
9 Count I Products. Skyworks has induced and continues to induce the infringement of the Patent-  
10 in-Suit by offering such products and inducing its customers and third parties to use such products  
11 in 5G-compliant mobile telephone products that are subsequently imported and sold in the United  
12 States.

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14 81. **Willful Infringement:** Skyworks has had actual knowledge of the Patent-in-Suit since at  
15 least as early as November 8, 2019, when Skyworks contacted DENSO to inquire about securing  
16 a license to DENSO's ScAIN patent portfolio.

17 82. As of that time and since that time, Skyworks has known that its continued actions would  
18 infringe and actively induce the infringement of one or more claims of the Patent-in-Suit.

19 83. Nonetheless, Skyworks continued to make, use, import, and sell the Accused Products  
20 without DENSO's authorization.

21  
22 84. **Damages:** DENSO is entitled to recover damages adequate to compensate for Defendants  
23 infringement of the Patent-in-Suit and will continue to be damaged by such infringement.

24 85. DENSO is entitled to recover damages from Defendants to compensate them for  
25 Defendants' infringement, as alleged above, in an amount measured by no less than a  
26 reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C.  
27 § 284.  
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1 86. Further, Defendants' infringement of DENSO's rights under the Patent-in-Suit will  
2 continue to damage DENSO's business, causing irreparable harm for which there is no adequate  
3 remedy at law, unless enjoined by the Court.

4  
5 87. As a result of Defendants' acts of infringement, Plaintiff has suffered and will  
6 continue to suffer damages in an amount to be proven at trial.

7  
8 **DEMAND FOR JURY TRIAL**

9 Under Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiffs respectfully  
10 request a trial by jury on all issues so triable.

11  
12 **PRAYER FOR RELIEF**

13  
14 WHEREFORE, Plaintiffs respectfully request the following relief:

15 A. A judgment that the Patent-in-Suit is valid and enforceable;

16 B. A judgment that Defendant directly infringes, and/or actively induces infringement of  
17 one or more claims of the Patent-in-Suit;

18 C. A judgment that awards Plaintiff all damages adequate to compensate it for  
19 Defendants' infringement and willful infringement of the Patent-in-Suit, including enhanced  
20 damages and all pre- judgment and post- judgment interest at the maximum rate permitted by law;

21 D. A judgment that awards Plaintiff all appropriate damages under 35 U.S.C. § 284  
22 for Defendants' past infringement with respect to the Patents-in-Suit;

23 E. A judgment that awards Plaintiffs all appropriate damages under 35 U.S.C. § 284  
24 for Defendant's continuing or future infringement, up until the date such judgment  
25 is entered with respect to the Patent-in-Suit, including ongoing royalties, pre- and  
26 post-judgment interest, costs, and disbursements as justified under 35 U.S.C. § 284;  
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1 F. A judgment that this case is exceptional under 35 U.S.C. § 285;

2 G. An accounting of all damages not presented at trial;

3 H. An injunction against making, using, selling offering to sell, and/or importing all  
4 infringing products unless Skyworks agrees to a license after a jury verdict; and  
5

6 I. A judgment that awards Plaintiffs their costs, disbursements, attorneys' fees, and  
7 such further and additional relief as is deemed appropriate by the Court.  
8  
9

10 Dated: June 20, 2025

Respectfully submitted,

11 WIGGIN AND DANA LLP  
12

13 /s/Joseph M. Casino

By: Joseph M. Casino (*Pro Hac Vice* to be submitted)

14 Joseph M. Casino (*Pro Hac Vice* to be submitted)

15 Michael J. Kasdan (*Pro Hac Vice* to be submitted)

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18 Email: [mkasdan@wigin.com](mailto:mkasdan@wigin.com)

19 Attorneys for Plaintiff

DENSO CORPORATION  
20

21 Dated: June 20, 2025

THINKINGFORWARD LLC

22 /s/Christopher P. Broderick

By: Christopher P. Broderick

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Local Counsel for Plaintiff

28 DENSO CORPORATION

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I hereby attest that each of the other signatories to this document have concurred in the filing of this document.

Dated: June 20, 2025

/s/Christopher P. Broderick  
By: Christopher P. Broderick